

### **REMARKS/ARGUMENTS**

Claims 5, 7, 10-12, 14, 16-17, 19-20, 25, 27, 30-32, 34, 36-37 and 39-44 are pending in the application. Claims 5, 7, 10, and 14 are amended, no claims are cancelled, and Claims 43 and 44 are added. The amendments to the claims as indicated herein do not add any new matter to this application.

### **CLAIM REJECTIONS--35 U.S.C. § 102**

Claims 5, 7, 14, 16, 17, 19, 20, 25, 27, 34, 36, 37, 39 and 40 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 6,208,985 ("*Krehel*"). This rejection is respectfully traversed.

Each of the pending claims recites one or more elements that are not disclosed, taught, or suggested by the cited art.

#### **Claim 5**

Claim 5, as amended, recites:

A method comprising:

prior to executing a search query to perform a search, displaying a user interface on a display, the user interface displaying a graphical representation of the search query, the graphical representation including at least a numerical preview indication of an expected size of a dataset resulting from application of at least a portion of the query;

wherein the displaying of the user interface includes at least displaying a graphical preview indication that is a visually distinct region located in a proximity to an icon representing a filter, the region having a thickness representative of the expected size of the dataset **and having a shape suggestive of a funnel**; and

wherein the graphical preview indication is separate from the icon.  
(emphasis added)

At least the above-bolded portion of Claim 5 is not disclosed, taught, or suggested by *Krehel*.

Claim 5 recites **“displaying a graphical preview indication that is a visually distinct region..., the region having a thickness representative of the expected size of the dataset and having a shape suggestive of a funnel”** (emphasis added). *Krehel* fails to teach or disclose the limitation that the region has a thickness representative of the expected size of the dataset and *having a shape suggestive of a funnel*. Rather, using the references upon which the Office Action relied with respect to the graphical preview indication (Fig. 16b and col. 17, lines 1-25, *Office Action*, p. 3), each of the streams that represent items where filter or tag operations are applied are linear. For example, in Fig. 16b, a stream with 427 items enters a tagging operation that results in a stream of 242 items and another stream of 185 items. The widths of the streams do not exhibit a shape suggestive of a funnel by narrowing or widening in any way within the figure. In *Krehel*, the stream with 427 items connects to the tagging operation and a stream with 242 items that meet the tagging requirements results. The stream with 427 items does not show the shape suggestive of a funnel to result in the stream with 242 items. Rather the change is abrupt once the stream connects to the tagging bay and a new stream with a much narrowing width (stream with 242 items) immediately results. As such, the Claim 5 limitation of the “region...having a shape suggestive of a funnel” fails to be taught or disclosed by *Krehel*.

As at least one element recited by Claim 5 is not disclosed, taught, or suggested by *Krehel*, it is respectfully submitted that Claim 5 is patentable over the cited art and is thus in condition for allowance.

Claim 7

Claim 7, as amended, recites:

A method comprising:

prior to executing a search query to perform a search, displaying a user interface on a display, the user interface displaying a graphical representation of the search query, the graphical representation including at least

a first graphical preview indication that is a first visually distinct region, having a first starting width and a first ending width, **the width of the first visually distinct region continuously narrowing or widening from the first starting width to the first ending width**, the first visually distinct region being located in a proximity to a first icon representing a first filter, the first starting width having a width that is representative of an expected size of a first input dataset, and the first ending width having a width that is representative of an expected size of a first dataset after application of the first filter on the first input dataset;

wherein the first graphical preview indication is separate from the first icon; and

a second graphical preview indication that is a second visually distinct region, having a second starting width and a second ending width, the second visually distinct region being located in a proximity to a second icon representing a second filter, the second starting width located at the first ending width, the second starting width being equal to the first ending width, the second starting width having a width that is representative of an expected size of a second input dataset, the second input dataset being equal to the first dataset, the second ending width having a width that is representative of an expected size of a second dataset after application of the second filter on the second input dataset, **the width of the second visually distinct region continuously narrowing or widening from the second starting width to the second ending width**, the second visually distinct region being adjacent to and connected to the first visually distinct region; wherein the second graphical preview indication is separate from the second icon. (emphasis added)

At least the above-bolded portion of Claim 7 is not disclosed, taught, or suggested by

*Krehel*.

Claim 7 recites “**the width of the first [second] visually distinct region continuously narrowing or widening from the first [second] starting width to the first [second] ending width**” (emphasis added). *Krehel* fails to teach or disclose the limitation that the widths of any of the visually distinct regions *continuously narrowing or widening* from the starting width of the visual distinct region to the ending width. Rather, using the references upon which the Office Action relied with respect to the visually distinct region (Fig. 16a and 16b, *Office Action*, p. 4), each of the streams that represent items where filter or tag operations are applied are linear and do not narrow or widen at all. The streams maintain the same width throughout with a stream entering a filter, and a new stream with a new exiting from the filter. For example, in Fig. 16b, a stream with 427 items enters a tagging operation (or filter) that results in a stream of 242 items and another stream of 185 items. The widths of the streams do not exhibit any continuous narrowing or widening in any way within the figure. In *Krehel*, the stream with 427 items maintains the same width and enters a filter. Exiting the filter is a new stream with 242 items that has a new width. The stream with 242 items enters another filter and a stream with a new width exits the filter with 205 items. The widths of all of the streams in *Krehel* maintain the same widths and do not demonstrate any widening or narrowing. Rather, changes in the widths of the streams of *Krehel* occur abruptly, upon entering and exiting a filter. As such, the Claim 7 limitation of the “the width of the first [second] visually distinct region *continuously narrowing or widening* from the first [second] starting width to the first [second] ending width” fails to be taught or disclosed by *Krehel*.

As at least one element recited by Claim 7 is not disclosed, taught, or suggested by *Krehel*, it is respectfully submitted that Claim 7 is patentable over the cited art and is thus in condition for allowance.

Claim 14

Claim 14, as amended, recites:

A method comprising:

displaying a user interface on a display, the user interface displaying graphical representations of a search query, **wherein at least one or more portions of the search query are divided into one or more query steps represented in the graphical representation as tiled boxes**, each of the one or more query steps corresponding to a portion of the search query, each of the one or more query steps including one or more attributes;

wherein each tiled box is able to be independently disabled without removing the components of the one or more query steps associated with the tiled box from the query representation; and

**wherein the one or more query steps are a plurality of query steps that are arranged in an order, the order indicated by dataflow lines that connect one or more query steps to succeeding one or more query steps, and the order is alterable by dragging and dropping one or more query steps selected from the plurality of query steps to a new location in the query representation.**  
(emphasis added)

At least the above-bolded portion of Claim 14 is not disclosed, taught, or suggested by *Krehel*.

Claim 14 recites “wherein at least one or more portions of the search query are **divided into one or more query steps represented in the graphical representation as tiled boxes.**”

The Office Action alleges that *Krehel* teaches or discloses each of the limitations within Claim 14. However, nothing in *Krehel* teaches or suggests anything like portions of the search query divided into one or more query steps represented as tiled boxes. Rather *Krehel* references Fig. 2 and 3 to the recited limitations. (Office Action, p. 29). None of the drawings within Figs. 2 and 3 of *Krehel* show any item that resembles anything like a graphical representation as tiled boxes. As such, this limitation is not shown in *Krehel*.

In addition, Claim 14 recites **“wherein the one or more query steps are a plurality of query steps that are arranged in an order, the order indicated by dataflow lines that connect one or more query steps to succeeding one or more query steps, and the order is alterable by dragging to a new location and dropping a query step selected from the plurality of query steps”** (emphasis added). The Office Action again references *Krehel* Fig. 2 and 3 to teach this limitation. (Office Action, p. 29). However, nothing within the referenced sections in *Krehel* teaches or discloses any *dataflow lines* that connect the one or more query steps. There is a graphical representation of the relative size of the results, but this does not indicate, with particularity, the order indicated within the query steps. As such, this limitation is also not taught or disclosed by *Krehel*.

As at least one element recited by Claim 14 is not disclosed, taught, or suggested by *Krehel*, it is respectfully submitted that Claim 14 is patentable over the cited art and is in condition for allowance.

#### CLAIM REJECTIONS—35 U.S.C. § 103

Claims 10, 12, 30 and 32 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,966,126 ("Szabo") in view of U.S. Patent No. 6,366,299 ("Lanning") and in further view of U.S. Patent No. 6,297,824 ("Hearst"). This rejection is respectfully traversed.

Claims 11 and 31 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,966,126 ("Szabo") in view of U.S. Patent No. 6,366,299 ("Lanning"), in view of U.S. Patent No. 6,297,824 ("Hearst") and in further view of U.S. Patent No. 5,668,966 ("Ono"). This rejection is respectfully traversed.

Claims 41 and 42 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,966,126 ("Szabo") in view of U.S. Patent No. 6,366,299 ("Lanning"), in view of U.S. Patent No. 6,297,824 ("Hearst") and in further view of U.S. Patent No. 6,925,608 ("Neale"). This rejection is respectfully traversed.

Claim 10

Claim 10, as amended, recites:

A method comprising:

prior to executing a search query to perform a search, displaying a user interface on a display, the user interface displaying a graphical representation of the search query, the graphical representation including at least:

a first icon representing a first filter associated with the search query, and  
a second icon representing a second filter associated with the search query;  
and

the user interface including at least a set of logical operator buttons, **wherein each button is associated with a distinct logical operator; and in response to a selection of the first icon and second icon and a selection of a button from the set of logical operator buttons, applying the logical operator associated with the selected button to a dataset of the first filter represented by the first icon and a dataset of the second filter represented by the second icon.**  
(emphasis added)

At least the above-bolded portion of Claim 10 is not disclosed, taught, or suggested by *Szabo*, *Lanning*, and *Hearst*, either alone or in combination.

Claim 10 recites "the user interface including at least a set of logical operator buttons, **wherein each button is associated with a distinct logical operator**" (emphasis added). The Office Action alleges that *Szabo* and *Lanning* do not teach or disclose including the set of logical operator buttons and that *Hearst* teaches this limitation. (Office Action, p. 8). More specifically, the Office Action alleges that Fig. 13 in *Hearst* depicts logical operator buttons. The Office Action

states that the logical operator buttons correspond to selection unit 222 wherein each election unit 222 is a button used to activate an associated logic operator, such as “AND” and “NOT” (Office Action, p. 8). However, *Hearst* fails to teach the Claim 10 limitation “including at least a set of logical operator buttons, **wherein each button is associated with a *distinct* logical operator.**”

*Hearst* shows selection button 222a and selection 222b each associated with the logical operator “AND”. Each button is associated with the **same** operator. In fact, all of the selection buttons 222 are associated with the logical operator “AND” and the last text box 220 (*not button*) is associated with the logic operator “NOT.” No where does *Hearst* show the limitation that “each button is associated with a *distinct* logical operator” and thus at least one limitation is not taught or disclosed by the cited references.

Furthermore, Claim 10 recites “**in response to a selection of the first icon and second icon and a selection of a button from the set of logical operator buttons, applying the logical operator associated with the selected button to a dataset of the first filter represented by the first icon and a dataset of the second filter represented by the second icon.**” The Office Action states that *Szabo* and *Lanning* do not teach or disclose in response to a selection of the first icon and second icon and a selection of a button from the set of logical operator buttons and that *Hearst* teaches this limitation. (Office Action, p. 8). More specifically, the Office Action states that Fig. 13 and Fig. 15 in *Hearst* depict a selection of a first icon and second icon and a selection of a button from the set of logical operator buttons.

However, selecting 213b and 213c as the first and second icons and 222b as the logical operator from *Hearst* Fig. 15 does not apply the logical operator associated with the first and second icons. First, 213b and 213c from the Cat-a-Cone actually reflect a hierarchical structure that



may be applied to a database. Thus, 213b and 213c do not represent a “graphical representation of a search query,” but rather a possible hierarchy that may be used.

Second, once 213b and 213c as the first and second icons and 222b as the logical operator are selected, nothing is performed by the application. One must click the search button before any action occurs. This is in opposition to Claim 10 which recites, “in response to a selection of the first icon and second icon and a selection of a button from the set of logical operator buttons, applying the logical operator associated with the selected button to a dataset of the first filter represented by the first icon and a dataset of the second filter represented by the second icon.” Thus, as soon as the selections are made, the logical operator is applied to create an estimated dataset.

The Office Action, in the Response to Arguments, refutes these arguments, by citing *Hearst*, Col. 11, lines 30-43m and 49-51 and Col. 12, lines 20-40. However, these selection *still* do not apply the logical operator to the datasets of the first filter and second filter. For examples, *Hearst*, Col. 11, lines 39-42 state “By grouping terms and categories in NOT group object 230, the user indicates that documents including the member terms and associated with the member categories should not be returned in response to the query.” This does not teach “in response to a selection of the first icon and second icon and a selection of a button from the set of logical operator buttons, applying the logical operator associated with the selected button to a dataset of the first filter represented by the first icon and a dataset of the second filter represented by the second icon.” Rather, *Hearst* states, in Col. 11, lines 55-60 “The present interactive interface also includes search button 218. Search button 218 responds to activation or a ‘click on it’ by taking the text terms and categories associated with each group object 220, constructing a query that is a conjoining of disjuncts, and submitting that query to the associated search engine.”

Thus, nothing occurs in *Hearst* upon selection of the first icon and second icon and a selection of a button from the set of logical operator buttons, until the search button is 'clicked.'

As at least one element recited by Claim 10 is not disclosed, taught, or suggested by *Szabo*, *Lanning*, and *Hearst*, either alone or in combination, it is respectfully submitted that Claim 10 is patentable over the cited art and is in condition for allowance.

#### DEPENDENT CLAIMS

Claims 11, 12, and 41 are dependents of independent Claim 10. Claims 16, 17, 19, and 20 are dependents of independent Claim 14. These dependant claims also include the limitations of claims upon which they depend. These dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Thus reconsideration of the rejection on these claims is respectfully requested. Claims 25, 27, 30-32, 34, 36, 37, 39, 40, and 42 are the computer readable storage medium forms of Claims 5, 7, 10-12, 14, 16, 17, 19, 20, and 41 and should also be allowed.

#### CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Please charge any shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

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